DATE SUBMITTED: 3/28/2010

DATE DICC APPROVED: 8/31/10

DATE LAST REVIEWED: 

COURSE INFORMATION FORM

DISCIPLINE
Computer Science & Information Systems

COURSE TITLE
Web Database Programming

CRHR 3 LECT HR 2 LAB HR 2 CLIN/INTERN HR 0 CLOCK HR 0

CATALOG DESCRIPTION
This course will teach web site developers who perform architectural planning, technology selection, or web site programming tasks how to create web sites that use current web database technology components on both the client workstation and the web server. The course will show students how to create a multi-tiered web site that accesses a database using current web database programming tools.

PREREQUISITES
CSIS 128 Web Development, CSIS 143 Database Design and Management, CSIS 123 Programming Fundamentals

EXPECTED STUDENT OUTCOMES IN THE COURSE (ESO)
Upon completion of this course, the student will be able to:
1. Describe the services-based application model as it applies to a web application.
2. Use a web database programming tool to create a web application.
3. Create web pages that use web database controls and client-side scripting.
4. Create web pages that use web database server components and server-side scripting.
5. Develop server components to implement business services.
6. Access a database from a web page by using various data tools and data objects.
7. Manage web database server components.
8. Use features of the server operating system and web server security to control access to a web site.
9. Create web database systems to solve a variety of business-related problems.
10. Convert customer requirements into efficient business systems.
11. Evaluate a variety of variables associated with current technologies, and make appropriate selection decisions.

GENERAL EDUCATION OUTCOMES (ESO)

Specify which general education outcomes, if any, are substantially addressed by the course. Numbers in parentheses identify the Expected Student Outcomes linked to the specific General Education Outcome.

1. Critical Thinking
   B. Define, analyze, and evaluate information, materials and data
      3. Unambiguously define problems with issues                      (9, 10, 11)
      4. Integrate information and see relevant relationships that broaden and deepen understanding (9, 10, 11)

2. Life-Long Learning
   C. Attributes of an Awareness of the Convergence of Knowledge
      3. Synthesize information to facilitate application                (9, 10, 11)
PROGRAM-LEVEL OUTCOMES

CAREER AND TECHNICAL EDUCATION PROGRAM OUTCOMES

Specify which Career and Technical program outcomes, if any, are substantially addressed by the course by completing the “Career and Technical Education template” to show the relationship between course and program outcomes to assessment measures.

1. Use industry specific software and/or apply troubleshooting skills to solve problems.
2. Create and defend solutions to real life business challenges.
3. Demonstrate professional oral and written communication skills.
4. Work effectively in a team environment.
5. Recognize the need for continued professional development.

CLASS-LEVEL ASSESSMENT MEASURES

Student accomplishment of expected student outcomes will be assessed using the following measures. (Identify which measures are used to assess which outcomes.)

1. Projects (1-11)
2. Assignments/Exams (1-11)
Individual instructors may order this outline as fits the needs of their individual courses. In addition, they may place more emphasis on some areas than on others. What is assured is that this particular list is covered in the course. Other topics may be added to a course as the instructor sees fit, and as time and interest allow. An asterisk can be used to mark an item as optional.

I. Introduction, architecture of an internet–based database system
II. XHTML and CSS overview
III. Scripting language fundamentals; comparison with other programming languages
IV. Functions and control structures
V. Manipulating strings
VI. Creating web forms and processing user input
VII. Working with files and directories
VIII. Manipulating arrays
IX. Review of database concepts
X. Managing a web database
XI. Using Structured Query Language to select, update, insert, and delete records
XII. Managing state information using cookies and session variables